APPENDIX D -- MARKET PACKAGES

The National ITS Architecture uses the term "Market Package" to represent an ITS improvement strategy or set of strategies that can be deployed as a unit to address a transportation or air quality objective or problem. The Market Package terminology is considered to be synonymous with improvement strategies. This appendix provides a complete listing of the Market Packages as found in the National ITS Architecture—Implementation Strategy. For detailed descriptions/definitions of each Market Package, please use the National ITS Architecture CD-ROM. As stated in the Integrating ITS in the Planning Process handbook, "it is important to note that the listing of Market Packages is neither comprehensive nor prescriptive." This listing should be used as a starting point. Other ITS Market Packages may be defined in response to specific problems, may be generated as part of the development of the ITS industry in the coming years.

The Market Packages address the specific service requirements of traffic managers, transit operators, travelers, and other ITS stakeholders. The Market Packages have been organized into seven (7) major application areas.

- 1. Traffic Management (ATMS)
- 2. Transit Management (APTS)
- 3. Traveler Information (ATIS)
- 4. Advanced Vehicle Safety Systems (AVSS)
- 5. Commercial Vehicle Operations CVO)
- 6. Emergency Management (EM)
- 7. ITS Planning (ITS)





Market Packages are also structured to segregate services that are likely to encounter technical or non-technical challenges from lower risk services. This approach identifies a subset of the Market Packages that are likely early deployments. At the other end of the spectrum, several of the Market Packages represent advanced products or services that will not be available for some time. Many of the Market Packages are also incremental so that more advanced packages can be efficiently implemented by building on common elements that were deployed earlier with more basic packages. The Market Packages were defined with enough granularity to support specific benefits analysis and clear ties to transportation problems. Some of the User Services are too broadly defined to allow this sort of evaluation.

It is important to note that the Market Packages are illustrative rather than prescriptive. The actual implementation variations that are possible across the country are myriad and cannot be enumerated through a finite set of packages. The Market Packages are tools that allow this Implementation Strategy to discuss incremental deployment of ITS services in a manner that is relevant to the underlying architecture definition. In order to more accurately specify Market Packages in tables, each is given an abbreviation indicating the general class of stakeholder and an index (e.g., ATMS01 is a Market Package primarily of interest to transportation managers).

Code	Market Package Name	
Traffic Management		
ATMS01	Network Surveillance	
ATMS02	Probe Surveillance	
ATMS03	Surface Street Control	
ATMS04	Freeway Control	
ATMS05	HOV Lane Management	
ATMS06	Traffic Information Dissemination	
ATMS07	Regional Traffic Control	
ATMS08	Incident Management System	
ATMS09	Traffic Prediction and Demand Management	
ATMS10	Electronic Toll Collection	
ATMS11	Emissions Monitoring and Management	
ATMS12	Virtual TMC and Smart Probe Data	



Code	Market Package Name	
ATMS13	Standard Railroad Grade Crossing	
ATMS14	Advanced Railroad Grade Crossing	
ATMS15	Railroad Operations Coordination	
ATMS16	Parking Facility Management	
ATMS17	Reversible Lane Management	
ATMS18	Road Weather Information System	
Transit Management		
APTS1	Transit Vehicle Tracking	
APTS2	Transit Fixed-Route Operations	
APTS3	Demand Response Transit Operations	
APTS4	Transit Passenger and Fare Management	
APTS5	Transit Security	
APTS6	Transit Maintenance	
APTS7	Multi-modal Coordination	
APTS8	Transit Traveler Information	
Traveler Information		
ATIS1	Broadcast Traveler Information	
ATIS2	Interactive Traveler Information	
ATIS3	Autonomous Route Guidance	
ATIS4	Dynamic Route Guidance	
ATIS5	ISP Based Route Guidance	
ATIS6	Integrated Transportation Management/Route Guidance	
ATIS7	Yellow Pages and Reservation	
ATIS8	Dynamic Ridesharing	



Code	Market Package Name	
ATIS9	In Vehicle Signing	
Advanced Vehicle Safety Systems		
AVSS01	Vehicle Safety Monitoring	
AVSS02	Driver Safety Monitoring	
AVSS03	Longitudinal Safety Warning	
AVSS04	Lateral Safety Warning	
AVSS05	Intersection Safety Warning	
AVSS06	Pre-Crash Restraint Deployment	
AVSS07	Driver Visibility Improvement	
AVSS08	Advanced Vehicle Longitudinal Control	
AVSS09	Advanced Vehicle Lateral Control	
AVSS10	Intersection Collision Avoidance	
AVSS11	Automated Highway System	
Commercial Vehicle Operations		
CVO01	Fleet Administration	
CVO02	Freight Administration	
CVO03	Electronic Clearance	
CVO04	CV Administrative Processes	
CVO05	International Border Electronic Clearance	
CVO06	Weigh-In-Motion	
CVO07	Roadside CVO Safety	
CVO08	On-board CVO Safety	
CVO09	CVO Fleet Maintenance	
CVO10	HAZMAT Management	



Code	Market Package Name	
Emergency Management		
EM1	Emergency Response	
EM2	Emergency Routing	
EM3	Mayday Support	
ITS Planning		
ITS1	ITS Planning	

